

The importance of Competency Assessment in Practice: A Literature Review

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ABSTRACT: Competency evaluation is critical for maintaining competency, quality, and safety in a variety of fields of practice, including healthcare, education, and beyond. This literature review investigates the importance of competency assessment in practical settings, providing light on its many ramifications. This study examines the underlying theories, procedures, and outcomes related with competency assessment practices, drawing on a wide range of research literature. It investigates how competency assessment serves as the foundation for evaluating individuals' skills, knowledge, and abilities, facilitating professional development, improving organisational performance, and encouraging accountability. Furthermore, this analysis explains the changing landscape of competency evaluation frameworks, emphasising the importance of contextually relevant and culturally sensitive methodologies. It also emphasises the problems and ethical considerations inherent in competency evaluation, such as guaranteeing fairness, minimising bias, and striking a balance between standardisation and individualization. By synthesising current evidence, this study emphasises the importance of strong competency assessment methods in building competence, resilience, and innovation in a variety of professional contexts.

Keywords: Competency, assessment, evaluation

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“Documenting competence is becoming essential—not optional—and is likely to become mandatory in the near future for initial and continuing licensure and certification, and perhaps even for employment.” (Lenburg, 1999 p. 1)

When discussing Registered Nurses, it will always be imperative to assess their professional growth, skills and confidence to make sure that they practice safely (Ardern et al., 2019; Bergren & Maughan, 2020; Clasen et al., 2003; Cross et al., 2006; Nestler, 2019; Pol-Castañeda et al., 2020; Robbins et al., 2001; Sharghi et al., 2015; Stobinski, 2008; Tabari-Khomeiran et al., 2007; Tosin et al., 2017; Wilkinson, 2013; Zahn Erthal & Costa Teixeira, 2020). This is a matter of great discussion that is being given a lot of importance lately, in various countries across the world, such as the USA, UK, Australia and several other countries (Carr, 2004) in relation to doctors, nurses and various other healthcare professionals. In Malta this is no different. In Malta, since January 2021, the Specialist Accreditation Committee for Nurses and Midwives of Malta has been officially set up and has been working for the past year to start standardising qualifications related to Specialist Nurses in Malta. This means that the issue of competencies is now becoming more important in Malta as well, where this project is taking place on a national basis under the authority of the Department of Health of Malta. It is also becoming

common practice in Malta for healthcare employers to assess newly employed persons on the basis of competency as a way of assessing their knowledge, skills and attitudes and their preparedness for work.

Arcand & Neumann (2005) and various other authors state that nursing managers and nursing employers, nurse regulators, associations, educational institutions, unions, accreditation organisations, governments and the public expect quality to be ascertained within nursing practice (Arcand & Neumann, 2005; Ardern et al., 2019; Christianson, 2020; Desmarais et al., 2020; Ossenberget al., 2016; Purvis et al., 2015; Robbins et al., 2001; Stobinski, 2008; van Wyk et al., 2003). Camelo & Angerami (2013) state that professional competence offers specialised care that facilitates the development of strategies and instruments to improve healthcare. Takase & Teraoka (2011) talk about the demand by the public expecting high quality and competent nursing care. Kim & Sim (2020) state that economic growth and interest in global health have increased the demand for quality improvement in health care, especially since regulation of doctors, nurses and other healthcare professionals started. These started demanding a certain conformity in healthcare (and nursing) practice and therefore regulators started using competencies as a means of making demands, skills, knowledge and competencies uniform throughout the

various professions. Sastre-Fullana et al. (2017) also mention that the development and establishment of advanced practice nurses has added another reason to introduce competencies as a means of standardising registration and competency assessment methods.

Contrastingly to this, Stobinski (2008) explicitly states that health professional boards rarely attempt to assess competency after the initial licensure of nurses. Whittaker et al. (1999) reinforce this by asserting that, upon registration, we presume nurses to be competent, unless they demonstrate otherwise. Another important point that Stobinski (2008) mentions is that once nurses start working in a new area or subspecialty, their level of clinical competency regresses to a lower level. As a result, it is critical that training is ongoing and that competency is not based solely on prelicensure education (Ääri et al., 2008; Stobinski, 2008; Whittaker et al., 1999).

Campbell et al. (2020), Satu et al. (2013) and Zubairi et al. (n.d.), outline another aspect of competencies. They state that competencies can increase communication between professionals. They even help to make patient care more patient-centred and to guide clinical practices bringing them in line with protocols, policies and research. In nursing education competencies help students understand what they learn and achieve their desired outcomes by providing assessments that are “clear, valid and defensible” (p. 97).

Yamamoto et al. (2021) discuss another very important and interesting issue. They state that declining birth rates and an ageing population, as well as an advancement in medical technology as well as the increasing awareness of human rights have increased interest in developing and using competencies to ensure safe nursing standards and practices and even to maintain educational standards for nurses from pre-registration education to post-registration continuing education. Sasaki et al. (2019) confirm this besides continuing to agree that continuous nursing professional development is a crucial requirement to maintain nursing standards. This reality is not only present in Japan but in various countries across the world, including in Malta. Similar to what is stated by Yamamoto et al. (2021) in Japan, in Malta and Europe the population is ageing, even as a consequence of the advancement of medicine and as concurrently, the life expectancy of the population is rising.

International bodies, such as the World Health Organisation (World Health Organisation, 2001; World Health Organisation, 2015), the International Council of Nurses (2012) and the Institute of Medicine (2003) confirm this, stating that it is paramount for registered nurses to provide high quality care, as this will affect the overall care given within healthcare institutions. Arrigoni et al. (2017) talk about the European Parliament and Council (European Parliament and Council, 2005) that, in their Directive 36 of 2005, establish the minimum requirements for theoretical and clinical nursing education, and they continue by mentioning the Bologna Process (European Higher Education Area, 1999) which

started proposing ways of designing, developing, implementing and even evaluating study programmes. As a matter of fact, Nagelsmith (1995) views competence as “an outcome criterion for effective education, coping and development” (p. 245). However, Arrigoni et al. (2017) state that on reviewing a large amount of literature, they found out that although several different tools were used for evaluation, they found no correlation between the different evaluation methods used and insisted that “the use of a single, generally accepted and well-known evaluation tool was indispensable” (p. 181). This is also confirmed by Satu et al., (2013). Watson et al. (2002), who discuss clinical competence assessment in nursing education, state that theoretical assessment when assessing nursing students should be accompanied by an assessment of practice, but again they insist that this is not done universally, and that clinical assessment is completely omitted in some nursing educational programmes.

Literature demonstrates that a considerable amount of studies have been carried out, researching competencies in relation to specialized and specific nursing areas. These include (but are not limited to):

- Geriatric care (American Physical Therapy Association, 2020; Bahrami et al., 2019; Geriatrics Society, 2021; Iheneche, 2010; Kubiciel-Lodzińska & Solga, 2020; Kubiciel-Lodzińska & Maj, 2021; Mauk, 2010; Oeseburg et al., 2015; Voutilainen et al., 2004).
- Nursing documentation (Johnson et al., 2010; Mykkänen et al., 2012; Voutilainen et al., 2004).
- The primary healthcare setting (Andersson et al., 2017; International Council of Nurses, 2012; Törnvall et al., 2004; WHO Regional Office for Europe, 2020; World Health Organisation, 2015).
- Community nursing (Kuo et al., 2021).
- Palliative care (Meirelles Sousa et al., 2015).
- Childcare and investing in childcare as an investment in future adults and hence in future populations (Bektas et al., 2020; Gibson, Fletcher, & Casey, 2003; Hennerby & Joyce, 2011).
- Surgical nursing (Bhowmik, 2015; Leal et al., 2020; Nestler, 2019; Sobaski & Abraham, 2018).
- Accident and Emergency nursing care (Abelsson et al., 2018; Nilsson et al., 2020; Shayne et al., 2006; Thobaity et al., 2017).
- Nursing of people with intellectual disabilities (While & Clark, 2014).
- Mental health nursing (Clasen et al., 2003; Feng et al., 2018; Gigantesco & Giuliani, 2011).
- Cultural competence and how it is often left out within formal nursing education (Pacquiao, 2007).
- Data and information technology nursing (Bergren & Maughan, 2020).
- Anaesthesia nursing (Jeon, Meretoja, et al., 2020a, 2020b; Jeon, Ritmala-Castrén, et al., 2020).

A large number of authors talked about the application of competencies for use within nursing education, to develop nursing courses, assess student nurses' skills and ensure

appropriate standards are achieved in Registered Nurses before registration (Arrigoni et al., 2017; Butler et al., 2011; Christianson, 2020; Gabrani, 2021; Gardulf et al., 2016; Gibson, Fletcher, & Rscn, 2003; Institute of Medicine, 2003; Jeon, Ritmala-Castrén, et al., 2020; Kajander Unkuri et al., 2014; Kapucu & Koliba, 2017; Kelvin, n.d.; Ko et al., 2013; C. B.; Lenburg et al., 2009; Levett-Jones et al., 2011; Löfmark & Mårtensson, 2017; Nagelsmith, 1995; Nursing and Midwifery Council (UK), 2010; Oesburg et al., 2015; Oeseburg et al., 2015; Pacquiao, 2007; Park et al., 2013; Redfern et al., 2002; Salem et al., 2018; Satu et al., 2013; Wu et al., 2016; Yanhua & Watson, 2011). Bahrami et al. (2019) and Purfarzad et al. (2019) state that it is crucial for nurses (and other healthcare professionals) in these specialised areas to be assessed on specific competencies that are related to particular – rather than general – areas of nursing practice. Nilsson et al. (2020), Bahrami et al. (2019), World Health Organisation (2015) and the International Council of Nurses (2012) underscore the frequent neglect and omission of competency assessment in these areas. As a final thought, Manley & Garbett (2000) state that apart from being useful for professional reasons, assessing competence and competency is crucial for political and economic reasons, as well as for job evaluation purposes. In fact, they mention equity, fairness, breakdown of professional boundaries, and identification of essential work components, career progression and access to different professions through the use of competencies in job recruitment.

The aim of using competencies, therefore is very broad as can be seen from the literature. They can start to be used before qualification to assess student nurses' knowledge, skills and attitudes, and then they can continue to be used within nursing practice to assess, maintain and improve nurses' standards of care within general areas of nursing, as well as in specialised areas. Another important point was that competence changes with a change in work area or speciality and that it is often underestimated, or inadequate assessment tools are used to assess it. Although assessment, using competencies, is still being considered in some places, areas and countries, where it is not presently regularly used there is a consensus that by assessing competencies nursing standards can be monitored and improved in the interest of raising patient care standards and improving their quality of life.

REFERENCES

- Ääri, R. L., Tarja, S., & Helena, L. K. (2008). Competence in intensive and critical care nursing: A literature review. *Intensive and Critical Care Nursing*, 24(2), 78–89. <https://doi.org/10.1016/j.iccn.2007.11.006>
- Abelsson, A., Lindwall, L., Suserud, B.-O., & Rystedt, I. (2018). Ambulance Nurses' Competence and Perception of Competence in Prehospital Trauma Care. *Emergency Medicine International*, 2018(April), 1–6. <https://doi.org/10.1155/2018/5910342>
- Academy of Geriatric Physical Therapy. (2008). Section on Geriatrics, APTA Essential Competencies in the Care of Older Adults at the Completion of the Physical Therapist Professional Program of Study Essential Competencies in the Care of Older Adults.
- al Thobaity, A., Plummer, V., & Williams, B. (2017). What are the most common domains of the core competencies of disaster nursing? A scoping review. In *International Emergency Nursing* (Vol. 31, pp. 64–71). Elsevier Ltd. <https://doi.org/10.1016/j.ienj.2016.10.003>
- American Physical Therapy Association. (2020). Academy of Geriatric Physical Therapy Essential Competencies in the Care of Older Adults at the Completion of the Entry-level Physical Therapist Assistant Program of Study. <http://www.americangeriatrics.org/files/documents/>
- Andersson, H., Lindholm, M., Pettersson, M., & Jonasson, L. L. (2017). Nurses' competencies in home healthcare: An interview study. *BMC Nursing*, 16(1), 1–9. <https://doi.org/10.1186/s12912-017-0264-9>
- Arcand, L. L., & Neumann, J. A. (2005). Nursing Competency Assessment Across the Continuum of Care. *The Journal of Continuing Education in Nursing*, 36(6), 247–255.
- Ardern, R., Taylor, A., Windsor, C., Campbell, C., & Malouf, N. (2019). The Function of Competencies in Nursing: A Critical Exploration.
- Arrigoni, C., Grugnetti, A. M., Caruso, R., Gallotti, M. L., Borrelli, P., & Puci, M. (2017). Nursing students' clinical competencies: A survey on clinical education objectives. *Annali Di Igiene Medicina Preventiva e Di Comunita*, 29(3), 179–188. <https://doi.org/10.7416/ai.2017.2145>
- Bahrami, M., Purfarzad, Z., Keshvari, M., & Rafiei, M. (2019). The components of nursing competence in caring for older people in Iranian hospitals: A qualitative study. *Iranian Journal of Nursing and Midwifery Research*, 24(2), 124–130. https://doi.org/10.4103/ijnmr.IJNMR_83_18
- Bektas, I., Bektas, M., & Ayar, D. (2020). Developing and Evaluating the Psychometric Properties of the Pediatric Nursing Competency Scale for Nursing Students. *Florence Nightingale Journal of Nursing*, 28(2), 133–142. <https://doi.org/10.5152/FNJN.2020.19065>

- Bergren, M. D., & Maughan, E. D. (2020). Data and Information Literacy: A Fundamental Nursing Competency. *NASN School Nurse (Print)*, 35(3), 140–142. <https://doi.org/10.1177/1942602X20913249>
- Bhowmik, S. R. (2015). Essential Nursing Competencies and its Learning Activities. *Indian Journal of Surgical Nursing*, 4(3), 85–88. <https://doi.org/10.21088/ijsn.2277.467X.4315.4>
- Butler, M. P., Cassidy, I., Quillinan, B., Fahy, A., Bradshaw, C., Tuohy, D., O'Connor, M., Mc Namara, M. C., Egan, G., & Tierney, C. (2011). Competency assessment methods - Tool and processes: A survey of nurse preceptors in Ireland. *Nurse Education in Practice*, 11(5), 298–303. <https://doi.org/10.1016/j.nepr.2011.01.006>
- Camelo, S. H. H., & Angerami, E. L. S. (2013). Professional Competence: The Building of concepts and Strategies Developed by Health Services and Implications for Nursing. *Florianopolis*, 22(2), 552–560.
- Campbell, L. A., Harmon, M. J., Joyce, B. L., & Little, S. H. (2020). Quad Council Coalition community/public health nursing competencies: Building consensus through collaboration. *Public Health Nursing*, 37, 96–112.
- Carr, S. J. (2004). Assessing clinical competency in medical senior house officers: Now and why should we do it? In *Postgraduate Medical Journal* (Vol. 80, Issue 940, pp. 63–66). <https://doi.org/10.1136/pmj.2003.011718>
- Christianson, K. L. (2020). Emotional Intelligence and Critical Thinking in Nursing Students: Integrative Review of Literature. *Nurse Education*. <https://doi.org/https://doi.org/10.1097/NNE.0000000000000801>
- Clasen, C., Meyer, C., Brun, C., Mase, W., & Cauley, K. (2003). Development of the Competency Assessment Tool-Mental Health, an Instrument to Assess Core Competencies for Mental Health Care Workers. *Psychiatric Rehabilitation Journal*, 27(1), 10–17.
- Cross, S., Block, D., Josten, L., Reckinger, D., Olson Keller, L., Strohschein, S., Rippke, M., & Savik, K. (2006). Development of the Public Health Nursing Competency Instrument. *Public Health Journal*, 23(2), 108–114. <http://www.nursing.umn>.
- Desmarais, M., Galiano, O., Gazemar, V., & Fréchette, J. (2020). The enneagram model for nursing competencies development-An exploratory qualitative study. *Journal of Nursing Education and Practice*, 10(8), 1. <https://doi.org/10.5430/jnep.v10n8p1>
- European Higher Education Area. (1999). European Higher Education Area and Bologna Process. <http://www.ehea.info/page-ministerial-conference-bologna-1999>
- European Parliament and Council. (2005). DIRECTIVE 2005/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 September 2005 on the recognition of professional qualifications (Text with EEA relevance). <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:255:0022:0142:en:PDF>
- Gabrani, J. (2021). Updating Nursing Competencies in Primary Healthcare in Albania; Transforming Roles Through Tailored Education. *International Journal of Public Health*, 66. <https://doi.org/10.3389/ijph.2021.1604085>
- Gardulf, A., Nilsson, J., Florin, J., Leksell, J., Lepp, M., Lindholm, C., Nordström, G., Theander, K., Wilde-Larsson, B., Carlsson, M., & Johansson, E. (2016). The Nurse Professional Competence (NPC) Scale: Self-reported competence among nursing students on the point of graduation. *Nurse Education Today*, 36, 165–171. <https://doi.org/10.1016/j.nedt.2015.09.013>
- Geriatrics Society, A. (2021). Partnership for Health in Aging: Multidisciplinary Competencies in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree.
- Gibson, F., Fletcher, M., & Casey, A. (2003). Classifying general and specialist children's nursing competencies. *Journal of Advanced Nursing*, 44(6), 591–602.
- Gibson, F., Fletcher, M., & Rscn, R. (2003). ISSUES AND INNOVATIONS IN NURSING EDUCATION Classifying general and specialist children's nursing competencies. *Journal of Advanced Nursing*, 44(6), 591–602.
- Gigantesco, A., & Giuliani, and M. (2011). Quality of life in mental health services with a focus on psychiatric rehabilitation practice. *Ann Ist Super Sanità*, 47(4), 363–372. <https://doi.org/10.4415/ANN>
- Hennerby, C., & Joyce, P. (2011). Implementation of a competency assessment tool for agency nurses working in an acute paediatric setting. *Journal of Nursing Management*, 19(2), 237–245. <https://doi.org/10.1111/j.1365-2834.2011.01223.x>
- Iheneche, E. (2010). Cultural Diversity and Cultural Competency: New Issues for Elderly Care and Services Human Ageing and Elderly Care.

Institute of Medicine. (2003). *Health Professions Education: A Bridge to Quality*. National Academy Press.

International Council of Nurses. (2012). *Reforming Primary Health Care: A Nursing Perspective*.

Jeon, Y., Meretoja, R., Vahlberg, T., & Leino-Kilpi, H. (2020a). Developing and psychometric testing of the anaesthesia nursing competence scale. *Journal of Evaluation in Clinical Practice*, 26(3), 866–878. <https://doi.org/10.1111/jep.13215>

Jeon, Y., Meretoja, R., Vahlberg, T., & Leino-Kilpi, H. (2020b). Self-assessed anaesthesia nursing competence and related factors. *Journal of Nursing Education and Practice*, 10(6), 9. <https://doi.org/10.5430/jnep.v10n6p9>

Jeon, Y., Ritmala-Castrén, M., Meretoja, R., Vahlberg, T., & Leino-Kilpi, H. (2020). Anaesthesia nursing competence: Self-assessment of nursing students. *Nurse Education Today*, 94. <https://doi.org/10.1016/j.nedt.2020.104575>

Johnson, M., Jefferies, D., & Lagdon, R. (2010). The Nursing and Midwifery Content Audit Tool (NMCAT): a short nursing documentation audit tool. *Journal of Nursing Management*. <https://doi.org/10.1111/j.1365-2834.2010.01156.x>

Kajander Unkuri, S., Meretoka, R., Katajisto, J., Saarikoski, M., Salminen, L., Suhonen, R., & Leino-Kilpi, H. (2014). Self-assessed level of competence of graduating nursing students and factors related to it. *Nurse Education Today*, 34, 795–801.

Kapucu, N., & Koliba, C. (2017). Using Competency-based Portfolios as a Pedagogical Tool and Assessment Strategy in MPA Programs. *Journal of Public Affairs Education*, 23(4), 993–1016. <https://doi.org/10.1080/15236803.2017.12002301>

Kelvin, O. (n.d.). Gender Inequality in Nursing: Implication for Nursing Education, Practice and Management. 1–28. https://www.academia.edu/8615158/Gender_Inequality_in_Nursing_Implication_for_Nursing_Education_Practice_and_Management

Kim, A. Y., & Sim, I. O. (2020). Mediating factors in nursing competency: A structural model analysis for nurses' communication, self-leadership, self-efficacy, and nursing performance. *International Journal of Environmental Research and Public Health*, 17(18), 1–14. <https://doi.org/10.3390/ijerph17186850>

Ko, J.-K., Chung, M. S., Choe, M.-A., Park, Y. I., Bang, K.-S., Kim, J. A., Yoo, M. S., & Jang, H. Y. (2013). Modeling of Nursing Competencies for Competency-Based Curriculum Development. *The Journal of Korean*

Academic Society of Nursing Education, 19(1), 87–96. <https://doi.org/10.5977/jkasne.2013.19.1.87>

Kubiciel-Lodzińska, S. (2020). Transfer of Skills. How to integrate the competencies of elderly care migrants into the Polish labour market? <https://www.researchgate.net/publication/339326053>

Kubiciel-Lodzińska, S., & Maj, J. (2021). High-Skilled vs. Low-Skilled Migrant Women: the Use of Competencies and Knowledge—Theoretical and Political Implications: an Example of the Elderly Care Sector in Poland. *Journal of International Migration and Integration*. <https://doi.org/10.1007/s12134-021-00813-5>

Kuo, C. P., Hsieh, P. L., Chen, H. M., Yang, S. Y., Hsiao, Y. L., & Wang, S. L. (2021). Community health nursing competency and psychological and organizational empowerment of public health nurses: A cross-sectional survey. *Healthcare (Switzerland)*, 9(8). <https://doi.org/10.3390/healthcare9080993>

Leal, L. A., Henriques, S. H., Castro, F. F. S., Soares, M. I., Bragança, C., & Silva, B. R. da. (2020). Construction of the matrix of individual nursing competences in surgical units. *Revista Brasileira de Enfermagem*, 73(6), e20190584. <https://doi.org/10.1590/0034-7167-2019-0584>

Lenburg, C. B. (1999). Redesigning expectations for initial and continuing medical competence for contemporary nursing practice. *Online Journal of Issues in Nursing*.

Lenburg, C. B. ; Klein, C. ; Abdur-Rahman, V. ; Spencer, T. ; & Boyer, S. (2009). *Nursing Education Perspectives (Vol. 30)*.

Levett-Jones, T., Gersbach, J., Arthur, C., & Roche, J. (2011). Implementing a clinical competency assessment model that promotes critical reflection and ensures nursing graduates' readiness for professional practice. *Nurse Education in Practice*, 11(1), 64–69. <https://doi.org/10.1016/j.nepr.2010.07.004>

Löfmark, A., & Mårtensson, G. (2017). Validation of the tool assessment of clinical education (AssCE): A study using Delphi method and clinical experts. *Nurse Education Today*, 50, 82–86. <https://doi.org/10.1016/j.nedt.2016.12.009>

Manley, K., & Garbett, R. (2000). Paying Peter and Paul: Reconciling concepts of expertise with competency for clinical career structure. *Journal of Clinical Nursing*, 9(3), 347–358.

Mauk, K. L. (2010). Gerontological Nursing: Competencies for Care. *AORN Journal*, 91(1), 183–184.

- Meirelles Sousa, J., Alves, E. D., & Sousa, J. M. (2015). Nursing Competencies for palliative care in home care (Competências do enfermeiro para o cuidado paliativo na atenção domiciliar). *Acta Paul Enferm*, 28(3), 264–273. <https://doi.org/10.1590/1982>
- Mykkänen, M., Saranto, K., & Miettinen, M. (2012). Nursing audit as a method for developing nursing care and ensuring patient safety. NI 2012 : 11th International Congress on Nursing Informatics, June 23-27, 2012, Montreal, Canada. International Congress in Nursing Informatics (11th : 2012 : Montreal, Quebec), 2012(June), 301. <http://www.ncbi.nlm.nih.gov/pubmed/24199107><http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC3799087>
- Nagelsmith, L. (1995). Competence: An Evolving Concept. *The Journal of Continuing Education in Nursing*, 26(6), 245.
- Nestler, N. (2019). Nursing care and outcome in surgical patients - why do we have to care? In *Innovative Surgical Sciences* (Vol. 4, Issue 4, pp. 139–143). De Gruyter. <https://doi.org/10.1515/iss-2019-0010>
- Nilsson, J., Johansson, S., Nordström, G., & Wilder-Larsson, B. (2020). Development and Validation of the Ambulance Nurse Competence Scale. *Journal of Emergency Nursing*, 46(1), 34–43. <https://doi.org/10.1016/j.jen.2019.07.019>
- Nursing and Midwifery Council (UK). (2010). Standards for Pre-Registration Nursing Education.
- Oesburg, B., Roodbol, P. F., & Hilberts, R. (2015). Essential competencies for the education of nursing assistants and care helpers in elderly care. *Nurse Education Today*.
- Oeseburg, B., Hilberts, R., & Roodbol, P. F. (2015). Essential competencies for the education of nursing assistants and care helpers in elderly care. *Nurse Education Today*, 35(10), e32–e35. <https://doi.org/10.1016/j.nedt.2015.08.002>
- Ossenberg, C., Dalton, M., & Henderson, A. (2016). Validation of the Australian Nursing Standards Assessment Tool (ANSAT): A pilot study. *Nurse Education Today*, 36, 23–30. <https://doi.org/10.1016/j.nedt.2015.07.012>
- Pacquiao, D. (2007). The relationship between cultural competence education and increasing diversity in nursing schools and practice settings. *Journal of Transcultural Nursing*, 18(SUPPL. 1).
- <https://doi.org/10.1177/1043659606295679>
- Park, Y. I., Kim, J. A., Ko, J.-K., Chung, M. S., Bang, K.-S., Choe, M.-A., Yoo, M. S., & Jang, H. Y. (2013). An Identification Study on Core Nursing Competency. *The Journal of Korean Academic Society of Nursing Education*, 19(4), 663–674. <https://doi.org/10.5977/jkasne.2013.19.4.663>
- Pol-Castañeda, S., Rodríguez-Calero, M. Á., Zaforteza-Lallemand, C., Villafáfila-Gomila, C. J., Blanco-Mavillard, I., Ferrer-Cruz, F., & de Pedro-Gómez, J. (2020). Moving evidence into practice by advanced practice nurses in hospitalization wards. Protocol for a multicentre quasi-experimental study in three hospitals in Spain. *International Journal of Environmental Research and Public Health*, 17(10). <https://doi.org/10.3390/ijerph17103473>
- Purfarzad, Z., Bahrami, M., Keshvari, M., Rafiei, M., Sivertsen, N., & Cert, G. (2019). Effective factors for development of gerontological nursing competence: A qualitative study. *Journal of Continuing Education in Nursing*, 50(3), 127–133. <https://doi.org/10.3928/00220124-20190218-08>
- Purvis, S., Zupanc, T., Vandenberg, S., & Martin, H. (2015). Population-based nursing competency development. *Journal for Nurses in Professional Development*, 31(4), 231–236. <https://doi.org/10.1097/NND.0000000000000183>
- Redfern, S., Norman, I., Caiman, L., Watson, R., & Murrells, T. (2002). Assessing competence to practise in nursing: A review of the literature. *Research Papers in Education*, 17(1), 51–77. <https://doi.org/10.1080/02671520110058714>
- Robbins, C. J., Bradley, E. H., Spicer, M., & Mecklenburg, G. A. (2001). Developing leadership in healthcare administration: A Competency Assessment Tool. *Journal of Healthcare Management*, 46(3), 188–202.
- Salem, O. A., Aboshaiqah, A. E., Mubarak, M. A., & Pandaan, I. N. (2018). Competency Based Nursing Curriculum: Establishing the Standards for Nursing Competencies in Higher Education. *OALib*, 05(11), 1–8. <https://doi.org/10.4236/oalib.1104952>
- Sasaki, S., Fukada, M., Okuda, R., & Fujihara, Y. (2019). Impact of organization and career commitment on clinical nursing competency. *Yonago Acta Medica*, 62(2), 221–231. <https://doi.org/10.33160/yam.2019.06.007>
- Sastre-Fullana, P., Morales-Asencio, J. M., Sesé-Abad, A., Bennasar-Veny, M., Fernández-Domínguez, J. C., & De Pedro-Gómez, J. (2017). Advanced Practice Nursing Competency Assessment Instrument (APNCAI):

- Clinimetric validation. *BMJ Open*, 7(2). <https://doi.org/10.1136/bmjopen-2016-013659>
- Satu, K. U., Leena, S., Mikko, S., Riitta, S., & Helena, L. K. (2013). Competence areas of nursing students in Europe. In *Nurse Education Today* (Vol. 33, Issue 6, pp. 625–632). <https://doi.org/10.1016/j.nedt.2013.01.017>
- Sharghi, N. R., Alami, A., Khosravan, S., Mansoorian, M. R., & Ekrami, A. (2015). Academic training and clinical placement problems to achieve nursing competency. *J Adv Med Educ Prof*, 3(1), 15–20.
- Shayne, P., Gallahue, F., Rinnert, S., Anderson, C. L., Hern, G., & Katz, E. (2006). Reliability of a Core Competency Checklist Assessment in the Emergency Department: The Standardized Direct Observation Assessment Tool. *Academic Emergency Medicine*, 13(7), 727–732. <https://doi.org/10.1197/j.aem.2006.01.030>
- Sobaski, T., & Abraham, S. (2018). Nurse Competencies and Optimization of Patient Outcomes: The Synergy Model Medical-Surgical Nursing View project The Effect of Implementation of an Acuity Tool on a Medical Surgical Unit to Reduce Resuscitation Events View project. www.ijstrm.humanjournals.com
- Society, T. B. G. (2011). Effective healthcare for older people living in care homes Guidance on commissioning and providing. British Geriatrics Society Commissioning Guidance. https://www.bgs.org.uk/resources/effective-healthcare-for-older-people-living-in-care-homes%0Ahttp://www.bgs.org.uk/pdfs/2016_bgs_commissioning_guidance.pdf
- Stobinski, J. X. (2008). Perioperative Nursing Competency. *AORN Journal*, 88(3), 417–436.
- Tabari-Khomeiran, R., Kiger, A., Parsa-Yekta, Z., & Ahmadi, F. (2007). Competence Development Among Nurses: The Process of Constant Interaction. *The Journal of Continuing Education in Nursing*, 38(5), 211–218.
- Takase, M., & Teraoka, S. (2011). Development of the holistic nursing competence scale. *Nursing and Health Sciences*, 13(4), 396–403. <https://doi.org/10.1111/j.1442-2018.2011.00631.x>
- Törnvall, E., Wilhelmsson, S., & Wahren, L. K. (2004). Electronic nursing documentation in primary health care. *Scandinavian Journal of Caring Sciences*, 18(3), 310–317. <https://doi.org/10.1111/J.1471-6712.2004.00282.X>
- Tosin, C., Bonaldi, A., Biban, P., Salco, A., & Chinchio, P. (2017). Development of a Nursing Competency Assessment Tool: A Pilot Study inside the Department of Pediatric Intensive Care. *American Research Journal of Nursing*, 3(1), 1–8.
- van Wyk, R., Boshoff, A. B., & Bester, C. L. (2003). POSSIBLE COGNITIVE PROCESSES UNDERLYING COMPETENCY ASSESSMENT. *SA Journal of Industrial Psychology*, 29(3), 45–52.
- Voutilainen, P., Isola, A., & Muurinen, S. (2004). Nursing documentation in nursing homes-state-of-the-art and implications for quality improvement. *Scandinavian Journal of Caring*, 18, 72–81.
- Watson, R., Stimpson, A., Topping, A., & Porock, D. (2002). Clinical competence assessment in nursing: a systematic review of the literature. *Journal of Advanced Nursing*, 39(5), 421–431.
- While, A. E., & Clark, L. L. (2014). Development of a competency tool for adult nurses caring for people with intellectual disabilities. *Journal of Nursing Management*, 22, 803–810.
- Whittaker, S., Carson, W., & Smolenski, M. C. (1999). Assuring Continued Competence - Policy Questions and Approaches: How Should the Profession Respond? *Online Journal of Issues in Nursing*, 4(3). <https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume52000/No3Sept00/ArticlePreviousTopic/ContinuedCompetence.html>
- WHO Regional Office for Europe. (2020). Competencies for nurses working in primary health care. https://www.euro.who.int/__data/assets/pdf_file/0004/441868/Competencies-nurses-primary-health-care-eng.pdf
- Wilkinson, C. A. (2013). Competency assessment tools for registered nurses: An integrative review. *Journal of Continuing Education in Nursing*, 44(1), 31–37. <https://doi.org/10.3928/00220124-20121101-53>
- World Health Organisation. (2001). Nurses and Midwives for Health. WHO European Strategy for nursing and midwifery education. Guidelines for member states on the implementation of the strategy.
- World Health Organisation. (2015). Competencies for nurses working in primary health care.
- Wu, X. V., Enskär, K., Pua, L. H., Heng, D. G. N., & Wang, W. (2016). Development and psychometric testing of Holistic Clinical Assessment Tool (HCAT) for undergraduate nursing students. *BMC Medical Education*, 16(1), 1–9. <https://doi.org/10.1186/s12909-016-0768-0>
- Yamamoto, Y., Okuda, R., & Fukada, M. (2021). Factors affecting clinical nursing competency: A cross sectional study. *Yonago Acta Medica*, 64(1), 46–56. <https://doi.org/10.33160/yam.2021.02.008>

Yanhua, C., & Watson, R. (2011). A review of clinical competence assessment in nursing. *Nurse Education Today*, 31(8), 832–836. <https://doi.org/10.1016/j.nedt.2011.05.003>

Zahn Erthal, G. de O., & Costa Teixeira, R. da. (2020). Analysis of Professional and Educational Profile of Nurses of a General Hospital, to Create Professional Competence Matrix. *Frontiers in Education Technology*, 3(4), p114. <https://doi.org/10.22158/fet.v3n4p114>

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